## Remarks and Arguments

Claims 64-73 are pending in this case. Claim 73 has been amended to correct a typographical error.

### 35 U.S.C. §102-103

Claims 64-66, 68 and 70-72 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated by Garten et al., Advanced Material, Vol. 9, No. 2, pp. 127-131.

Claim 73 stands rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Garten in view of Yu, U.S. Patent 6,441,395.

Claims 67, 69 and 71 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Garten in view of Woo, U.S. 2001/0026878.

The Examiner makes three points in responding to Applicant's arguments (of December 23, 2004) distinguishing the same references. Applicant believes the following response to these three points can resolve an apparent difference in understanding between Applicant and the Examiner regarding construction of the present claims. Applicant's typographical error in claim 73, in the prior response, apparently contributed to the misunderstanding and Applicant apologizes for the confusion caused by this typographical error.

The Examiner's first point is based on this typographical error in claim 73. Applicant has amended claim 73 to delete the word "layer" in the phrase "depositing the second semiconducting polymer over the first semiconducting polymer layer . . . "

The present invention is directed to Applicant's discovery that the solubility of a **deposited** polymer layer is less than the solubility of the polymer per se and that using this finding, two discrete polymer layers can be formed using the same solvent without the first polymer layer being dissolved on deposition of the second polymer. Thus, according to the presently claimed invention, the second polymer is not dispersed into the first polymer layer. The first polymer layer is not dissolved because the solubility of a deposited layer of the first polymer is less than the solubility of the first polymer per se.

In contrast, the Examiner was of the view that depositing the second semiconducting polymer over the first semiconducting polymer layer from a solvent in which the first semiconducting polymer is soluble, would result in a homogenous version of the second polymer in the first polymer as disclosed in Garten et al. In contrast, as stated in the previous paragraph, this is not Applicant's claimed invention.

The Examiner's second point is that Applicant's prior argument was unconvincing because "blending and mixing the components are also mentioned throughout Applicant's present specification." In this regard, Applicant points out that family members of the present application include claims to the blends described in the specification. However, the claims of the present application are directed to an arrangement in which two discrete layers of polymers are provided, rather than one blended layer. Support in the specification for the present claims is found on pages 25 and 26, where an embodiment is described (with reference to Figure 28 and Table 4) comprising a layer of TFB and a separate layer of a 5F8BT:TFB blend. As seen from Table 4 and Figure 28, devices having a separate "intermediate" layer of TFB have a higher peak luminance efficiency and better luminance/voltage characteristics than those that do not have the intermediate layer. It had previously been assumed that if two separate layers were to be achieved, then different solvents must be used. However, the present Applicants have found that the same solvents may be used to deposit both layers as the solubility of a formed layer of TFB is less than the solubility of TFB which is not formed into a layer. This should resolve the Examiner's second point.

The Examiner's third point is that Garten anticipates at least depositing a second organic light emissive component polymer (SiPPV) over a first polymer layer (PVK) so that the second (SiPPV) polymer is dispersed homogeneously in the first organic light emissive component (PVK) polymer layer. First, this is incorrect. The SiPPV and the PVK in Garten et al. are blended prior to being deposited. Secondly, the present claims require that two discrete layers are formed, a first layer comprising the first polymer and a second layer comprising the second polymer. As noted by the Examiner, in Garten et al., the SiPPV layer is dispersed homogeneously in the PVK to form a single blended layer. As previously discussed, this is not covered by the present claims which require two discrete layers. This should resolve the Examiner's third point.

For the reasons set forth herein and in the prior response, Garten et al. taken alone, or in combination with Yu or Woo, fails to teach or suggest the subject matter of the present claims.

Reconsideration and allowance is respectfully requested. If the Examiner believes that a teleconference would expedite prosecution of the present application the Examiner is invited to call the Applicant's undersigned attorney at the Examiner's earliest convenience.

Any amendments or cancellation or submissions with respect to the claims herein is made without prejudice and is not an admission that said canceled or amended or otherwise affected subject matter is not patentable. Applicant reserves the right to pursue canceled or amended subject matter in one or more continuation, divisional or continuation-in-part applications.

To the extent that Applicant has not addressed one or more assertions of the Examiner because the foregoing response is sufficient, this is not an admission by Applicant as to the accuracy of such assertions.

## Supplemental IDS

Applicant submits herewith a Supplemental IDS with Woo, WO 99/54385.

Woo '385 discloses a device having a hole transporting layer of a polyfluorene-BFA copolymer over which is deposited a polymer blend to form an emissive layer. "BFA" is an arylamine with carboxylic acid groups.

The BFA layer is deposited from dimethylformamide and the emissive blend layer is deposited from xylene. Applicant understands that BFA is not soluble in xylene due to its polar carboxylic acid groups. Therefore, this disclosure is not believed to be relevant to the present claims.

Applicant is disclosing this document because Applicant's embodiment uses a similar emissive blend to that disclosed in Woo '385, and Applicant uses polyflourene-TFB copolymer as the hole transporting layer. While structurally, the TFB polymer is an analogue of the BFA material, however, in terms of the relevance to the present claims, its solubility characteristics are quite different.

Woo '385 has a later priority date than the present application. However, the two layer structure is in the priority application to Woo '385, but not in the priority application to Applicant's present case.

Reconsideration and allowance of the present claims is respectfully requested.

Respectfully submitted,

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